

REMARKS

Upon entry of the foregoing amendment, claims 1, 2, 4-9, 11-17, & 33-43 are pending. Claims 1, 2, 4, 6, & 9 have been amended; claims 18-30 have been cancelled without prejudice or disclaimer; and new claims 33-43 are added. Amendments to the claims are supported by the specification as filed. Unless otherwise indicated, amendments to the claims have been made solely for purposes of consistency.

In view of the foregoing amendment and the following remarks, allowance of the pending claims is requested.

Rejections Under 35 U.S.C. §102(e)

Claim 1

The Examiner has rejected independent claim 1 under 35 U.S.C. §102(e) as allegedly being anticipated by U.S. Patent No. 6,324,165 to Fan et al. ("Fan"). Applicants traverse this rejection because Fan does not disclose each and every feature of claim 1.

Claim 1, as amended, recites: "*a buffer manager... to adjust at least one of the first depth of the first buffer memory or the second depth of the second buffer memory.*" In the rejection, the Examiner states that "Fan discloses buffers/queues having depths...and these depths get adjusted (there is dynamic rate control/DRC and feedback which determines the current characteristics of the switch, the load or current capacity of the buffers and provides feedback to essentially load balance and control how many cells get stored in each buffer and make use of the extra capacity in the buffers, see dynamic rate based queues scheduler." See Final Office Action mailed May 6, 2005 ("Final Office Action"), pg 3, emphasis added. With this statement, the Examiner acknowledges a distinction between Fan and the claimed invention – Fan deals with adjusting how many cells "get stored" in each buffer, while the claimed invention deals with adjusting depths of the buffers themselves, that is, how many cells can be stored in each buffer.

One problem addressed by the claimed invention deals with cell loss when cells arrive at a buffer that is full. See Specification, pg. 5. The claimed invention solves this problem by adjusting the size of the buffers (i.e. depths) to handle

additional cells for that buffer depending on a quality of service level of that buffer, thus, assuring that buffers with higher quality of service levels lose fewer cells than those with lower quality of service levels.

Fan discloses allocating cells to different buffers, rather than adjusting the size/depth of buffers. See Fan, col. 3, ll. 43-46 ("The DRC scheduler detects congestion at bottleneck points in the switch and alleviates the congestion in a controlled manner by moving cell queuing towards the input side of the switch."); col. 10, ll. 12-14 ("...each class queue is treated like a virtual source whose service rate is dynamically adjusted to reflect the unused bandwidth available at a bottleneck point in the switch."), emphasis added. Furthermore, Fan apparently discloses that the different buffers of the system of Fan are "identical." See Fan, col. 6, ll. 60-62. This suggests that the depths of the buffer in Fan remain static, while allocation of cells to those buffers are adjusted.

For at least these reasons, Fan does not disclose each and every element of claim 1, as amended. Thus, the Examiner's rejection thereto must be withdrawn. Claims 2, and 4-8 depend from and add features to claim 1. For at least these reasons, these dependent claims are also patentable over Fan relied upon by the Examiner and the rejection thereto must be withdrawn.

Claim 9

Claim 9 recites features similar to those of claim 1. As discussed above in response to the Examiner's rejection of claim 1, Fan does not disclose all of the features of claim 1. As such, Fan does not disclose each and every element of claim 9. Thus, the Examiner's rejection thereto must be withdrawn. Claims 11-17 depend from and add features to claim 9. For at least these reasons, these dependent claims are also patentable over Fan relied upon by the Examiner and the rejection thereto must be withdrawn.

Claims 18-29

Solely to expedite prosecution, Applicants have cancelled claims 18-29 without prejudice or disclaimer.

New Claims 33-42

Applicants have added new claims 33-42. Newly added independent claim 33 includes “adjusting...assigned depths based on” monitored characteristics. As discussed above in response to the Examiner’s rejection of claim 1, Fan does not disclose adjustment of buffer depths, but deals with allocation of cells to different buffers to balance the load within those buffers. Thus, Fan does not disclose each and every element of claim 33. Accordingly, the Examiner’s indication of allowance claim 33 and claims 34-42 (which depend from claim 33) is proper.

Claim 43

New claim 43 recites various features that are not taught by the references cited. Accordingly, the Examiner’s indication of allowance claim 43 is proper.

CONCLUSION

Having addressed each of the foregoing rejections, it is respectfully submitted that a full and complete response has been made to the outstanding Office Action and, as such, the application is in condition for allowance. Notice to that effect is respectfully requested.

If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

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